

DEPARTMENT OF REGULATORY AND ECONOMIC RESOURCES (RER) BOARD AND CODE ADMINISTRATION DIVISION

# NOTICE OF ACCEPTANCE (NOA)

MIAMI-DADE COUNTY PRODUCT CONTROL SECTION 11805 SW 26 Street, Room 208 T (786) 315-2590 F (786) 315-2599 www.miamidade.gov/economy

WinDoor, Inc. 7500 Amsterdam Drive Orlando, FL 32832

SCOPE:

This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed and accepted by Miami-Dade County RER - Product Control Section to be used in Miami Dade County and other areas where allowed by the Authority Having Jurisdiction (AHJ).

This NOA shall not be valid after the expiration date stated below. The Miami-Dade County Product Control Section (In Miami Dade County) and/or the AHJ (in areas other than Miami Dade County) reserve the right to have this product or material tested for quality assurance purposes. If this product or material fails to perform in the accepted manner, the manufacturer will incur the expense of such testing and the AHJ may immediately revoke, modify, or suspend the use of such product or material within their jurisdiction. RER reserves the right to revoke this acceptance, if it is determined by Miami-Dade County Product Control Section that this product or material fails to meet the requirements of the applicable building code.

This product is approved as described herein, and has been designed to comply with the Florida Building Code, including the High Velocity Hurricane Zone.

DESCRIPTION: Series "9020" Aluminum Fixed Window - L.M.I.

**APPROVAL DOCUMENT:** Drawing No. **08-01634**, titled "9020 Picture Window – Large Missile Impact" sheets 1, 2, 2A and 3 through 11 of 11, dated 06/20/12, with revision D dated 09/04/14, prepared by manufacturer, signed and sealed by Luis R. Lomas, P.E., bearing the Miami-Dade County Product Control Revision stamp with the Notice of Acceptance number and expiration date by the Miami-Dade County Product Control Section.

MISSILE IMPACT RATING: Large and Small Missile Impact Resistant.

LABELING: Each unit shall bear a permanent label with the manufacturer's name or logo, city, state, model/series, and following statement: "Miami-Dade County Product Control Approved", unless otherwise noted herein.

**RENEWAL** of this NOA shall be considered after a renewal application has been filed and there has been no change in the applicable building code negatively affecting the performance of this product.

**TERMINATION** of this NOA will occur after the expiration date or if there has been a revision or change in the materials, use, and/or manufacture of the product or process. Misuse of this NOA as an endorsement of any product, for sales, advertising or any other purposes shall automatically terminate this NOA. Failure to comply with any section of this NOA shall be cause for termination and removal of NOA.

**ADVERTISEMENT:** The NOA number preceded by the words Miami-Dade County, Florida, and followed by the expiration date may be displayed in advertising literature. If any portion of the NOA is displayed, then it shall be done in its entirety.

**INSPECTION:** A copy of this entire NOA shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official.

This NOA revises NOA# 14-0107.11 and consists of this page 1 and evidence pages E-1 and E-2, as well as approval document mentioned above.

The submitted documentation was reviewed by Manuel Perez, P.E.

(MIAMI-DADE COUNTY)

10/30/14

NOA No. 14-0916.12 Expiration Date: January 17, 2018 Approval Date: November 06, 2014 Page 1

#### NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

#### **DRAWINGS** A.

- Manufacturer's die drawings and sections. 1.
- 2. Drawing No. 08-01634, titled "9020 Picture Window - Large Missile Impact", sheets 1, 2, 2A and 3 through 11 of 11, dated 06/20/12, with revision D dated 09/04/14, prepared by manufacturer, signed and sealed by Luis R. Lomas, P.E.

#### В. **TESTS**

- Test reports on: 1) Air Infiltration Test, per FBC, TAS 202-94 1.
  - 2) Uniform Static Air Pressure Test, Loading per FBC, TAS 202-94
  - 3) Water Resistance Test, per FBC, TAS 202-94
  - 4) Large Missile Impact Test per FBC, TAS 201-94
  - 5) Cyclic Wind Pressure Loading per FBC, TAS 203-94
  - 6) Forced Entry Test, per FBC 2411 3.2.1, TAS 202-94

along with installation diagram of an aluminum fixed window, prepared by National Certified Testing Laboratories, Test Report No. NCTL-210-3774-1, Specimens 1, 2, 3, 4, 5, 6, 7, 8, 9 and 10, dated 04/17/12, revised on 07/22/13 and updated on 09/27/13, signed and sealed by Gerald J. Ferrara, P.E.

### (Submitted under NOA# 12-0627.05)

- 2. Test reports on: 1) Air Infiltration Test, per FBC, TAS 202-94
  - 2) Uniform Static Air Pressure Test, Loading per FBC, TAS 202-94
  - 3) Water Resistance Test, per FBC, TAS 202-94
  - 4) Large Missile Impact Test per FBC, TAS 201-94
  - 5) Cyclic Wind Pressure Loading per FBC, TAS 203-94
  - 6) Forced Entry Test, per FBC 2411 3.2.1, TAS 202-94

along with installation diagram of an aluminum fixed window, prepared by National Certified Testing Laboratories, Test Report No. NCTL-210-3774-2, Specimens 1, 2, 3, 4, 5, 6 and 7, dated 04/17/12, signed and sealed by Gerald J. Ferrara, P.E.

## (Submitted under NOA# 12-0627.05)

- 3. Test reports on: 1) Air Infiltration Test, per FBC, TAS 202-94
  - 2) Uniform Static Air Pressure Test, Loading per FBC, TAS 202-94
  - 3) Water Resistance Test, per FBC, TAS 202-94
  - 4) Large Missile Impact Test per FBC, TAS 201-94
  - 5) Cyclic Wind Pressure Loading per FBC, TAS 203-94
  - 6) Forced Entry Test, per FBC 2411 3.2.1, TAS 202-94

along with installation diagram of an aluminum fixed window, prepared by National Certified Testing Laboratories, Test Report No. NCTL-210-3774-3, Specimens 1, 2, 3, 4, 5, 6 and 7, dated 04/17/12, signed and sealed by Gerald J. Ferrara, P.E.

(Submitted under NOA# 12-0627.05)

Manuel Perez, P.E. Product Control Examiner NOA No. 14-0916.12

Expiration Date: January 17, 2018 Approval Date: November 06, 2014

## WinDoor, Inc.

### NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

#### C. CALCULATIONS

- 1. Anchor verification calculations and structural analysis, complying with FBC-5<sup>th</sup> Edition (2014), dated 06/11/12, 06/18/12, 12/31/13 and updated on 09/10/14, prepared, signed and sealed by Luis R. Lomas, P.E. (Submitted partly under NOA# 12-0627.05)
- 2. Glazing complies with ASTM E1300-04

### D. QUALITY ASSURANCE

1. Miami-Dade Department of Regulatory and Economic Resources (RER)

#### E. MATERIAL CERTIFICATIONS

- 1. Notice of Acceptance No. 11–0624.02 issued to E.I. DuPont DeNemours & Co., Inc. for their "DuPont SentryGlas® Interlayer" dated 08/25/11, expiring on 01/14/17.
- 2. Test report No. ATI-60520-106.18, prepared by Architectural Testing, Inc., dated 11/09/06, with Revision #1 dated 11/29/06, issued to ENSINGER, Inc., for their Tecatherm® 66 GF Insulbar Thermal Barrier plastic material per ASTM D635-98 "Standard Test Method for Rate of Burning and/or Extent and Time of Burning of Plastics in a Horizontal Position" and ASTM D2843-99 "Standard Test Method for the Density of Smoke from the Burning Decomposition of Plastics", ASTM D1929-96 (2000)e01 "Standard Test Method for Ignition Properties of Plastics", also per ASTM G 155-00ae1 "Standard Practice for Operating Xenon Arc Light Apparatus for Exposure of Non-Metallic Materials" and ASTM D638-03 "Standard Test Method for Tensile Properties of Plastics", signed and sealed by Joseph A. Reeves, P.E. (Submitted under previous NOA# 14-0107.11)

#### F. STATEMENTS

- 1. Statement letter of conformance, complying with FBC-5<sup>th</sup> Edition (2014), and of no financial interest, dated September 9, 2014, signed and sealed by Luis R. Lomas, P.E.
- 2. Laboratory compliance letter for Test Reports No. NCTL-210-3774-1, NCTL-210-3774-2, and NCTL-210-3774-3, issued by National Certified Testing Laboratories, dated 04/17/12, all signed and sealed by Gerald J. Ferrara, P.E. (Submitted under NOA# 12-0627.05)

### G. OTHERS

1. Notice of Acceptance No. 14-0107.11, issued to WinDoor, Inc. for their Series "9020" Aluminum Fixed Window - L.M.I., approved on 04/03/14 and expiring on 01/17/18.

Manuel Perez, P.E. Product Control Examiner

NOA No. 14-0916.12 Expiration Date: January 17, 2018

Approval Date: November 06, 2014

	REVISIONS	er pentir <del>Ger</del> andon Promiti on utri Landon kan en	e jug e ere jamijutiere erek en nammen op 2,111
REV	DESCRIPTION	DATE	APPROVED
Α	ADDED CALL OUTS	10/24/12	R.L.
8	REVISED PER NEW TESTING	10/02/13	R.L.
С	REVISED PER MD COMMENTS	03/13/14	R.L.
D	ADDED GEOMETRIC SHAPES	09/04/14	R.L.

#### NOTES:

- 1. THE PRODUCT SHOWN HEREIN IS DESIGNED AND MANUFACTURED TO COMPLY WITH REQUIREMENTS OF THE FLORIDA BUILDING CODE INCLUDING THE HVHZ.
- 2. WOOD FRAMING AND MASONRY OPENING TO BE DESIGNED AND ANCHORED TO PROPERLY TRANSFER ALL LOADS TO STRUCTURE. FRAMING AND MASONRY OPENING IS THE RESPONSIBILITY OF THE ARCHITECT OR ENGINEER OF RECORD.
- 3. 1X BUCK OVER MASONRY/CONCRETE IS OPTIONAL.
- 4. WHERE SHIM OR BUCK THICKNESS IS LESS THAN 1-1/2" WINDOW UNITS MUST BE ANCHORED THROUGH THE FRAME IN ACCORDANCE WITH MANUFACTURER'S PUBLISHED INSTALLATION INSTRUCTIONS. ANCHORS SHALL BE SECURELY FASTENED DIRECTLY INTO MASONRY, CONCRETE OR OTHER STRUCTURAL SUBSTRATE MATERIAL.
- 5. WHERE WOOD BUCK THICKNESS IS 1-1/2" OR GREATER, BUCK SHALL BE SECURELY FASTENED TO MASONRY, CONCRETE OR OTHER STRUCTURAL SUBSTRATE. WINDOW UNITS MAY
   BE ANCHORED THROUGH FRAME TO SECURED WOOD BUCK IN ACCORDANCE WITH MANUFACTURER'S PUBLISHED INSTALLATION INSTRUCTIONS.
- 6. WHERE 1X BUCK IS NOT USED DISSIMILAR MATERIALS MUST BE SEPARATED WITH APPROVED COATING OR MEMBRANE. SELECTION OF COATING OR MEMBRANE IS THE RESPONSIBILITY OF THE ARCHITECT OR ENGINEER OF RECORD.
- 7. BUCKS SHALL EXTEND BEYOND WINDOW INTERIOR FACE SO THAT FULL FRAME SUPPORT IS PROVIDED.
- 8. SHIM AS REQUIRED AT EACH INSTALLATION ANCHOR WITH LOAD BEARING SHIM. SHIM WHERE SPACE OF 1/16" OR GREATER OCCURS. MAXIMUM ALLOWABLE SHIM STACK TO BE 1/4".
- 9. SHIMS SHALL BE MADE FROM MATERIALS CAPABLE OF SUSTAINING APPLICABLE LOADS, LOCATED AND APPLIED IN A THICKNESS CAPABLE OF SUSTAINING APPLICABLE LOADS.
- 10. WIND LOAD DURATION FACTOR Cd=1.6 WAS USED FOR WOOD ANCHOR CALCULATIONS.
- 11. FRAME MATERIAL: ALUMINUM 6063-T6.
- 12. UNITS MUST BE GLAZED PER ASTM £1300-04, SEE SHEET 6 FOR GLASS OPTIONS.
- 13. APPROVED IMPACT PROTECTIVE SYSTEM <u>IS NOT REQUIRED</u> FOR THIS PRODUCT IN WIND BORNE, DEBRIS REGIONS.
- 14. FOR ANCHORING INTO WOOD FRAMING OR 2X BUCK USE #12 WOOD SCREWS WITH SUFFICIENT LENGTH TO ACHIEVE A 1 5/8" MINIMUM EMBEDMENT INTO SUBSTRATE. LOCATE ANCHORS AS SHOWN IN ELEVATIONS AND INSTALLATION DETAILS.

- 15. FOR ANCHORING INTO MASONRY/CONCRETE USE 1/4" TAPCONS WITH SUFFICIENT LENGTH
  TO ACHIEVE A 1 1/4" MINIMUM EMBEDMENT INTO SUBSTRATE WITH 2 1/2" MINIMUM EDGE
  DISTANCE. LOCATE ANCHORS AS SHOWN IN ELEVATIONS AND INSTALLATION DETAILS.
- 16. FOR ANCHORING INTO METAL STRUCTURE USE #12 SMS OR SELF DRILLING SCREWS WITH SUFFICIENT LENGTH TO ACHIEVE 3 THREADS MINIMUM BEYOND STRUCTURE INTERIOR WALL. LOCATE ANCHORS AS SHOWN IN ELEVATIONS AND INSTALLATION DETAILS.
- 17. ALL FASTENERS TO BE CORROSION RESISTANT.
- 18. INSTALLATION ANCHORS SHALL BE INSTALLED IN ACCORDANCE WITH ANCHOR MANUFACTURER'S INSTALLATION INSTRUCTIONS AND ANCHORS SHALL NOT BE USED IN SUBSTRATES WITH STRENGTHS LESS THAN THE MINIMUM STRENGTH SPECIFIED BELOW:
  - A. WOOD MINIMUM SPECIFIC GRAVITY OF G=0.42
  - B. CONCRETE MINIMUM COMPRESSIVE STRENGTH OF 3,192 PSI.
  - C. MASONRY STRENGTH CONFORMANCE TO ASTM C-90, GRADE N, TYPE 1 (OR GREATER).
- D. METAL STRUCTURE: STEEL 18GA, 33KSI OR ALUMINUM 6063—T5 1/8" THICK MINIMUM 19. APPROVED GEOMETRIC SHAPES DIMENSIONS SHALL NOT EXCEED AN AREA OF 50 SQUARE

. APPROVED GEOMETRIC SHAPES DIMENSIONS SHALL NOT EXCLED AN AREA OF 50 SQUARE FEET AS TESTED. GEOMETRIC SHAPES ARE NOT LIMITED TO SHAPES SHOWN HEREIN.

SIGNED: 10/29/2014

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8 – 9	INSTALLATION DETAILS	p
10	COMPONENTS	
11	MULLION INSTALLATION DETAILS	

PRODUCT REVISED so complying with the Florida Building Code Acceptance No 14.0916.12

cceptance No 14.0916.12
spiration Date Jan.17,2018
www.manuel.a.com
NOTES
9020 PICTURE WINDOW
LARGE MISSILE IMPACT
NOTES

DRAWN: DWG NO. REV
A.P. 08-01634 D

SCALE NTS DATE 06/20/2012 SHEET 1 OF 11

7500 AMSTERDAM DRIVE

www.windoorinc.com

ORLANDO, FL 32832

Phone: 407.481.8400

\* No. 62514 \*

No. 62514 \*

No. 62514 \*

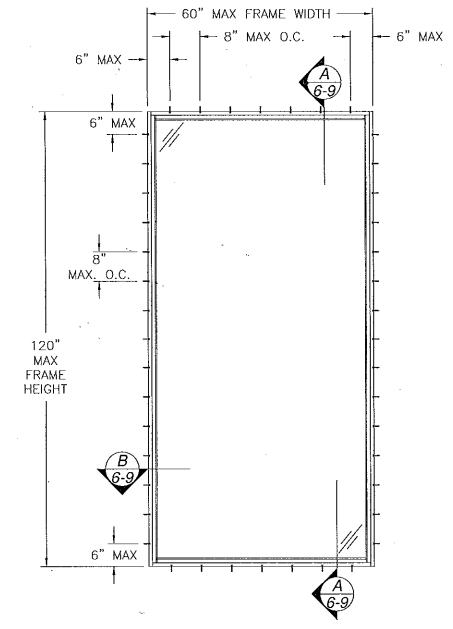
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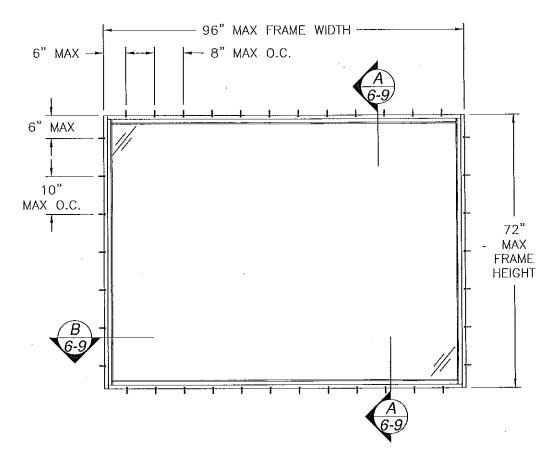


DESIGN PRESSURE RATING	IMPACT RATING
±100.0PSF	LARGE MISSILE IMPACT

MISSILE LEVEL D, WIND ZONE 4 AND HVHZ WITH GLAZING A

DESIGN PRESSURE RATING	IMPACT RATING
±90.0PSF	LARGE MISSILE IMPACT

MISSILE LEVEL D, WIND ZONE 4 AND HVHZ WITH GLAZING B AND C



9020 PICTURE WINDOW EXTERIOR VIEW

REFER TO CHART #1 & #2 IN SHEET 3 FOR OTHER UNITS RATINGS

DESIGN PRESSURE RATING	IMPACT RATING
±110.0PSF	LARGE MISSILE IMPACT

MISSILE LEVEL D, WIND ZONE 4 AND HVHZ WITH GLAZING A, B AND C

REVISIONS APPROVED DESCRIPTION DATE 10/24/12 R.L. ADDED CALL OUTS 10/02/13. REVISED PER NEW TESTING R.L. R.L. REVISED PER MD COMMENTS 03/13/14 09/04/14 R.L. ADDED GEOMETRIC SHAPES

SIGNED: 10/29/2014

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No 14-0916.12
Expiration Date Jan. 17, 2018
By Manual Control
A

WinDoor INCORPORATED

7500 AMSTERDAM DRIVE ORLANDO, FL 32832

Phone: 407.481.8400 Fax: 407.481.0505

www.windoorinc.com

9020 PICTURE WINDOW LARGE MISSILE IMPACT ELEVATIONS AND CHARTS

DRAWN:
A.P.
SCALE NTS

I: DWG NO.

08-01634 D

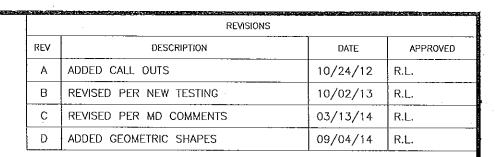
DATE 06/20/2012 SHEET 2 OF 11

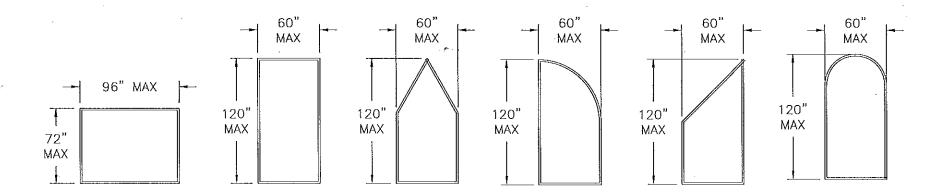
\* No. 6251X \*

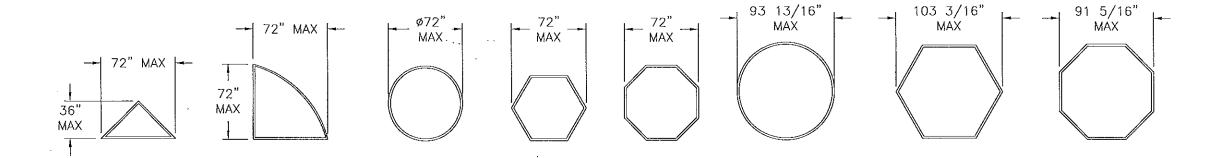
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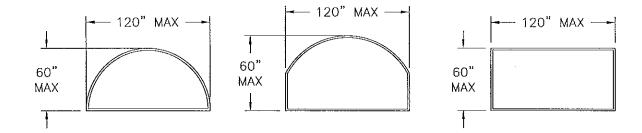
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APPROVED SHAPES
SEE NOTE 19 SHEET 1

WinDoor INCORPORATED 7500 AMSTERDAM DRIVE ORLANDO, FL 32832

Phone: 407.481.8400 Fax: 407.481.0505

www.windoorinc.com

9020 PICTURE WINDOW LARGE MISSILE IMPACT ELEVATIONS AND CHARTS

DRAWN: DWG NO. REV
A.P. 08-01634 D

SCALE NTS DATE 06/20/2012 SHEET 2A OF 11

SIGNED: 10/29/2014

SIGNED: 10/29/2014

R. LOMINICENS TO STATE OF THE STATE OF THE

PRODUCT REVISED as complying with the Florida

Mimmi/Dade Product Control

Acceptance No 4.0416.12 Expiration Date Jan. 17,2018

## CHART #1

									Dociar	nrace	uro rat	ing for	units	uith al	azina	A (nef)										
Frame									Design	press	ure rac		ne wid		aziny i	r (psi)										
Height	24	.0	30	.0	36.0		42	.0	48.0		54		60.0		66.0		72.0		78.0		84.0		90.0		96.0	
(in)	Pos	Neg	Pos	Neg	Pos	Neg	Pos	Neg	Pos	Neg	Pos	Neg	Pos	Neg	Pos	Neg	Pos	Neg	Pos	Neg	Pos	Neg	Pos	Neg	Pos	Neg
24.0	110.0	147.3	110.0	146.0	110.0	144.7	110.0	143.3	110.0	142.0	110.0	140.7	110.0	139.3	110.0	138.0	110.0	136.7	110.0	135.3	110.0	134.0	110.0	132.7	110.0	131.3
30.0	110.0	146.0	110.0	145.8	110.0	144.2	110.0	142.5	110.0	140.8	110.0	139.2	110.0	137.5	110.0	135.8	110.0	134.2	110.0	132.5	110.0	130.8	110.0	129.2	110.0	127.5
36.0	110.0	144.7	110.0	144.2	110.0	144.0	110.0	142.0	110.0	140.0	110.0	138.0	110.0	136.0	110.0	134.0	110.0	132.0	110.0	130.0	110.0	128.0	110.0		110.0	
42.0	110.0	143.3	110.0	142.5	110.0	142.0	110.0	141.8	110.0	139.5	110.0	137.2	110.0	134.8	110.0	132.5	110.0	130.2	110.0	127.8	110.0	125.5	110.0		110.0	
48.0	110.0	142.0	110.0	140.8	110.0	140.0	110.0	139.5	110.0	139.3	110.0	136.7	110.0	134.0	140.0	131.3	110.0	128.7	110.0	126.0	110.0		110.0		110.0	
54.0	110.0	140.7	110.0	139.2	110.0	138.0	110.0	137.2	110.0	136.7	110.0	136.5	110.0	133.5	110.0	130.5	110.0	127.5	110.0	124.5	110.0		110.0		110.0	
60.0	110.0	139.3	110.0	137.5	110.0	136.0	110.0	134.8	110.0	134.0	110.0	133.5	110.0	133.3	110.0	130.0	110.0	126.7	110.0	123.3	110.0		110.0		110.0	
66.0	110.0	138.0	110.0	135.8	110.0	134.0	110.0	132.5	110.0	131.3	110.0	130.5	110.0	130.0	110.0	129.8	110.0	126.2	110.0	122.5	110.0		110.0		110.0	
72.0	110.0	136.7	110.0	134.2	110.0	132.0	110.0	130.2	110.0	128.7	110.0	127.5	110.0	126.7	110.0	126,2	110.0	126.0	110.0	122.0	110.0		110.0	114.0	110.0	110.0
78.0	110.0	135.3	110.0	132.5	110.0	130.0	110.0	127.8	110.0	126.0	110.0	124.5	110.0	123.3	110.0	122.5	110.0	122.0	110.0	121.8	110.0	117.5			<u> </u>	-
90.0	110.0 110.0	134.0 132.7	110.0	130.8 129.2	110.0 110.0	128.0 126.0	110.0	125.5 123.2	110.0	123.3	110.0 110.0	121.5	110.0 110.0	120.0 116.7	110.0 110.0	118.8 115.2	110.0 110.0	118.0	110.0	117.5		-	-	-	-	
96.0	110.0	131.3	110.0	127.5	110.0	124.0	110.0 110.0	120.8	110.0	118.0	110.0	118.5 115.5	110.0	113.3	110.0	111.5	110.0	110.0	-	-	-	-		-	<del> </del>	<del></del>
102.0	110.0	130.0	110.0	125.8	110.0	122.0	110.0	118.5	110.0	115.3	110.0	112.5	110.0	110.0	107.8	107.8	110.0	-	-	-	-	-	-	<del>-</del> -	<del>                                     </del>	H
102.0	110.0	128.7	110.0	124.2	110.0	120.0	110.0	116.2	110.0	112.7	109.5	109.5	106.7	106.7	101.0	107.0				-	-	<del>-</del>	<del></del>		H	<del></del>
114.0	110.0	127.3	110.0	122.5	110.0	118.0	110.0	113.8	110.0	110.0	106.5	106.5	103.3	103.3	-				-			-	_		-	<del>-</del>
120.0	110.0	126.0	110.0	120.8	110.0	116.0	110.0	111.5	107.3	107.3	103.5	103.5	100.0	100.0				_	_	_	_	-	-		<del>  -</del>	-
126.0	110.0	124.7	110.0	119.2	110.0	114.0	109.2	109.2	104,7	104,7	100.5	100.5	-	-	-	-		-		-			-	-	<del>  -</del>	-
132.0	110.0	123.3	110.0	117.5	110.0	112.0	106.8	106.8	102.0	102.0	97.5	97.5	<del></del> -			-	-	-		-	-	-	-	-	<u> </u>	-
138.0	110.0	122.0	110.0	115.8	110.0	110.0	104.5	104.5	99.3	99.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<del>  -</del>	-
144.0	110.0	120.7	110.0	114.2	108.0	108.0	102.2	102.2	96.7	96.7	-	-	-		-	-	-	-	-	-	-	-	-	•	-	

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f	HA	14	1 3	#2

	Design pressure rating for units with glazing B and C (psf)																									
Frame	, i	Frame width (in)																								
Height	24	.0	30	.0	36	.0	42.0		48.0		54	54.0		.0	66	6.0	72	.0	78.0		84.0		90.0		96.0	
(in)	Pos	Neg	Pos	Neg	Pos	Neg	Pos	Neg	Pos	Neg	Pos	Neg	Pos	Neg	Pos	Neg	Pos	Neg	Pos	Neg	Pos	Neg	Pos	Neg	Pos	Neg
24.0	110.0	135.0	110.0	135.0	110.0	135.0	110.0	135.0	110.0	135.0	110.0	135.0	110.0	135.0	110.0	135.0	110.0	135.0	110.0	135.0	110.0	135.0	110.0	135.0	110.0	
30.0	110.0	135.0	110.0	135.0	110.0	135.0	110.0	135.0	110.0	135.0	110.0	135.0	110.0	135.0	110.0	135.0	110.0	135.0	110.0	135.0	110.0	135.0	110.0	135.0	110.0	
36.0	110.0	135.0	110.0	135.0	110.0	135.0	110.0	135,0	110.0	135.0	110.0	135.0	110.0	135.0	110.0	135.0	110.0	135.0	110.0	135,0	110.0	135.0	110.0	135.0	110.0	
42.0	110.0	135.0	110.0	135.0	110.0	135.0	110.0	135.0	110.0	135.0	110.0	135.0	110.0	135.0	110.0	135.0	110.0	135.0	110.0	135.0	110.0	135.0		135.0	110.0	_
48.0	110.0	135.0	110.0	135.0	110.0	135.0	110.0	135.0	110.0	135.0	110.0	135.0	110.0	135.0	110.0	135.0	110.0	135.0	110.0	135.0	110.0	135.0	110.0	131.3	110.0	126.0
54.0	110.0	135.0	110.0	135.0	110.0	135.0	110.0	135.0	110.0	135.0	110.0	135.0	110.0	135.0	110.0	135.0	110.0	135.0	110.0	135.0	110.0	133.0	110.0	127.0	110.0	121.0
60.0	110.0	135.0	110.0	135.0	110.0	135.0	110.0	135.0	110.0	135.0	110.0	135.0	110.0	135.0	110.0	135.0	110.0	135.0	110.0	135.0	110.0	130.0	110.0	123.3	110.0	116.7
66.0	110.0	135.0	110.0	135.0	110.0	135.0	110.0	135.0	110.0	135.0	110.0	135.0	110.0	135.0	110.0	135.0	110.0	135.0	110.0	135.0	110.0	127.7	110.0	120.3	110.0	113.0
72.0	110.0	135.0	110.0	135.0	110.0	135.0	110.0	135.0	110.0	135.0	110.0	135.0	110.0	135.0	110.0	135.0	110.0	135.0	110.0	134.0	110.0	126.0	110.0	118.0	110.0	110.0
78.0	110.0	135.0	110.0	135.0	110.0	135.0	110.0	135.0	110.0	135.0	110.0	135.0	110.0	135.0	110.0	135.0	110.0	134.0	110.0	133.7	110,0	125.0	-	-		-
84.0	110.0	135.0	110.0	135.0	110.0	135.0	110.0	135.0	110.0	135.0	110.0	133.0	110.0	130.0	110.0	127.7	110.0	126.0	110.0	125.0		-	-	-	-	<u> </u>
90.0	110.0	135.0	110.0	135.0	110.0	135.0	110.0	135.0	110.0	131.3	110.0	127.0	110.0	123.3	110.0	120.3	110.0	118.0	ı	-	-	1	-	-	-	-
96.0	110.0	135.0	110.0	135.0	110.0	135.0	110.0	131.7	110.0	126.0	110.0	121.0	110.0	116.7	110.0	113.0	110.0	110.0				-	-	-	-	-
102.0	110.0	135.0	110.0	135,0	110.0	134.0	110.0	127.0	110.0	120,7	110.0	115.0	110.0	110.0	105.7	105,7	-	-	-	-	-	•	•	-	-	
108.0	110.0	135.0	110.0	135.0	110.0	130.0	110.0	122.3	110.0	115.3	109,0	109,0	103.3	103.3	-	-	-	-	-	-		-		-	<u> </u>	٠.
114.0	110.0	135.0	110.0	135.0	110.0	126.0	110.0	117.7	110.0	110.0	103.0	103.0	96.7	96.7	-	-	-	ļ		-		-	-	-	-	-
120.0	110.0	135.0	110.0	131.7	110.0	122.0	110.0	113.0	104.7.	104.7	97.0	97.0	90.0	90.0	-		-	_	· -	-	-	-	-	-		<u> </u>
126.0	110.0	135.0	110.0	128.3	110.0	118.0	108.3	108.3	99.3	99.3	91.0	91.0	•	•	-	-	-	-	•	-	-	-		-	-	-
132.0	110.0	135.0	110.0	125.0	110.0	114.0	103.7	103.7	94.0	94.0	85.0	85.0	ŧ	ŀ	-	-	-		1	-	-	-	-	-	-	
138.0	110.0	134.0	110.0	121.7	110.0	110.0	99.0	99.0	88.7	88.7	-		-	-	_	-	_	-	-	-	-	-	•	-		<u> </u>
144.0	110.0	131.3	110.0	118.3	106.0	106.0	94.3	94.3	83.3	83.3	-			-		<u> </u>			-	-	-	-	-	-	-	٠.

 - May a rose than gother (go	REVISIONS		
REV	DESCRIPTION	DATE	APPROVED .
Α	ADDED CALL OUTS	10/24/12	R.L.
8	REVISED PER NEW TESTING	10/02/13	R.L.
٠C	REVISED PER MD COMMENTS	03/13/14	R.L.
D	ADDED GEOMETRIC SHAPES	09/04/14	R.L.

SIGNED: 10/29/2014

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No 14-0916.12
Expiration Date 1340.11.0018
By Miami Dade Product Control

WinDoor INCORPORATED 7500 AMSTERDAM DRIVE ORLANDO, FL 32832

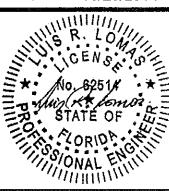
Phone: 407.481.8400 Fax: 407.481.0505

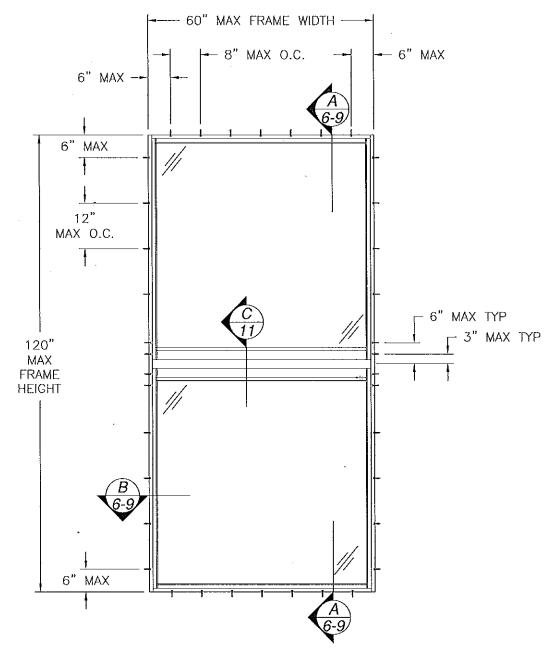
81.8400 0505 www.windoorinc.com

9020 PICTURE WINDOW LARGE MISSILE IMPACT ELEVATIONS AND CHARTS

DRAWN: DWG NO. REV
A.P. 08-01634 D

SCALE NTS DATE 06/20/2012 SHEET 3 OF 11





9020 PICTURE WINDOW

EXTERIOR VIEW

REFER TO CHART #3, THIS PAGE, FOR OTHER UNITS RATINGS

DESIGN PRESSURE RATING	IMPACT RATING
+100.0/-120.0PSF	LARGE MISSILE IMPACT

MISSILE LEVEL D, WIND ZONE 4 AND HVHZ WITH GLAZING A AND B

Ī		REVISIONS		
	REV	DESCRIPTION	DATE	APPROVED
	Α	ADDED CALL OUTS	10/24/12	R.L.
	В	REVISED PER NEW TESTING	10/02/13	R.L.
	С	REVISED PER MD COMMENTS	03/13/14	R.L.
	D	ADDED GEOMETRIC SHAPES	09/04/14	R.L.

### CHART #3

Design pressure rating (psf)

					Desig	gn pres	ssure ra	ating (į	ost)					
Frame						F	rame w	idth (in	)					
Height	24.	00	30.	00	36.	00	42.	00	48.	00	54.	00	60.	ÕO
(in)	Pos Neg		Pos	Neg	Pos	Neg	Pos	Neg	Pos Neg		Pos	Neg	Pos	Neg
24.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150,0	150.0	150.0	150,0	150.0	150.0
30.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
36.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
42.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
48.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
54.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	143.4	150.0
60.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	133.3	150.0
66.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	145.5	150.0	125.4	150.0
72.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	138.9	150.0	119.0	142.9
78.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	133.8	150.0	114.0	136.8
84.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	129.9	150.0	109.9	131.9
90.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	127.0	150.0	106.7	128.0
96.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	125.0	150.0	104.2	125.0
102.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	123.8	148.6	102.3	122.8
108.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	123.5	148.1	101.0	121.2
114.0	150.0	150.0	150,0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	123.5	148.1	100.3	120.3
120.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	123.5	148.1	100.0	120.0

SIGNED: 10/29/2014

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No 14-0416, 12
Expiration Date 120.17,2018
By Minim Dade Product Control.

Win	Door
INCORP	ORATED

7500 AMSTERDAM DRIVE ORLANDO, FL 32832

Phone: 407.481.8400 Fax: 407.481.0505

www.windoorinc.com

9020 PICTURE WINDOW LARGE MISSILE IMPACT ELEVATIONS AND CHARTS

DRAWN: DWG NO. REV
A.P. 08-01634 D

SCALE NTS DATE 06/20/2012 SHEET 4 OF 11

\* No. 6251X \*

No. 6251X \*

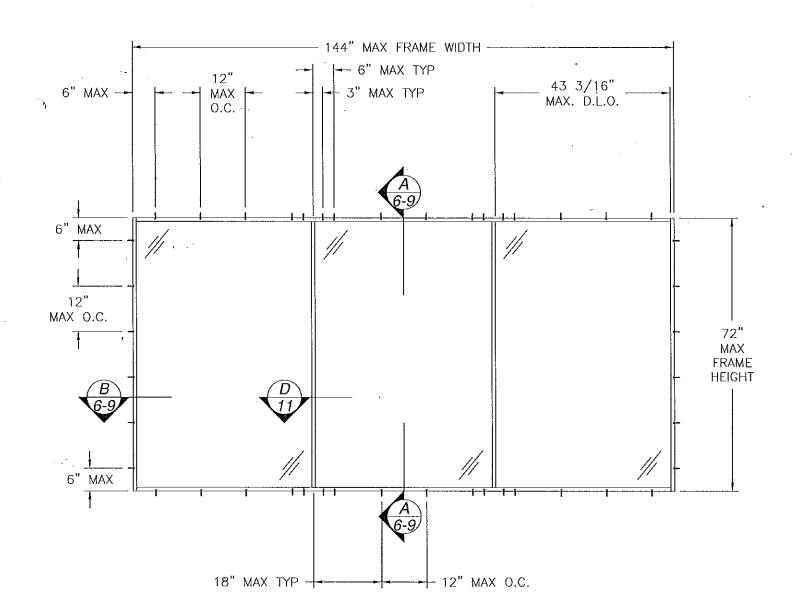
No. 6251X \*

STATE OF \*

STATE OF \*

NO. 6251X \*

NO. 6



REVISIONS DESCRIPTION DATE APPROVED ADDED CALL OUTS 10/24/12 R.L. REVISED PER NEW TESTING 10/02/13 R.L. REVISED PER MD COMMENTS 03/13/14 R.L. ADDED GEOMETRIC SHAPES 09/04/14 R.L.

#### CHART #4

Design pressure rating chart (psf)														
Frame	Total Frame Width (in)													
Height	36.00 54.00		72.00		90.00		108.00		126.00		144.00			
(in)	Pos	Neg	Pos	Neg	Pos	Neg	Pos	Neg	Pos	Neg	Pos	Neg	Pos	Neg
24.0	100.0	125.0	100.0	125.0	100.0	125.0	100.0	125.0	100.0	125.0	100.0	125.0	100.0	125.0
30.0	100.0	125.0	100.0	125.0	100.0	125.0	100.0	125.0	100.0	125.0	100.0	125.0	100.0	125.0
36.0	100.0	125.0	100.0	125.0	100.0	125.0	100.0	125.0	100.0	125.0	100.0	125.0	100.0	125.0
42.0	100.0	125.0	100.0	125.0	100.0	125.0	100.0	125.0	100.0	125.0	100.0	125.0	100.0	125.0
48.0	100.0	125.0	100.0	125.0	100.0	125.0	100.0	125.0	100.0	125.0	100.0	125.0	100.0	125.0
54.0	100.0	125.0	100.0	125,0	100.0	125.0	100.0	125.0	100.0	125.0	100.0	125.0	100.0	125.0
60.0	100.0	125.0	100.0	125.0	100.0	125.0	100.0	125.0	100.0	125.0	100.0	119.6	100.0	113.3
66.0	100.0	125.0	100.0	125.0	100.0	125.0	100.0	125.0	100.0	113.3	100.0	103.6	97.1	97.1
72.0	100.0	125.0	100.0	125.0	100.0	125.0	100.0	114.5	100.0	100.7	91.4	91.4	85.0	85.0

9020 TRIPLE PICTURE WINDOW

EXTERIOR VIEW

REFER TO CHART #4, THIS PAGE, FOR OTHER UNITS RATINGS

DESIGN PRESSURE RATING	IMPACT RATING			
±85.0PSF	LARGE MISSILE IMPACT			

MISSILE LEVEL D, WIND ZONE 4 AND HVHZ WITH GLAZING A, B AND C

WinDoor INCORPORATED 7500 AMSTERDAM DRIVE ORLANDO, FL 32832

Phone: 407.481.8400 Fax: 407.481.0505

www.windoorinc.com

D

9020 PICTURE WINDOW LARGE MISSILE IMPACT ELEVATIONS AND CHARTS

DRAWN: DWG NO.
A.P. 08-01634

SCALE NTS DATE 06/20/2012 SHEET 5 OF 11

\* No. 6251 \* \*

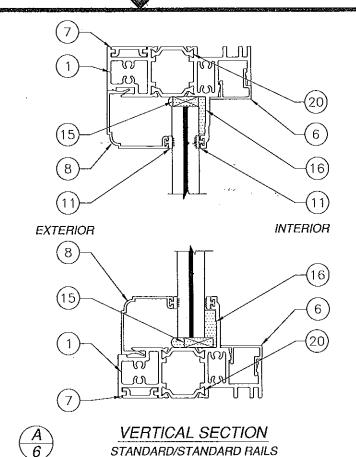
SIGNED: 10/29/2014

as complying with the Florida
Building Code
Acceptance No 4-046, 12
Expiration Date 720, 17.2018
By Mani Dade Product Control

PRODUCT REVISED

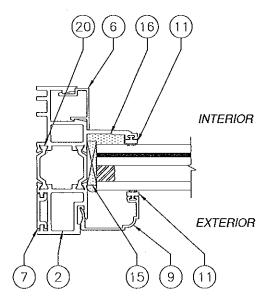
**A**,



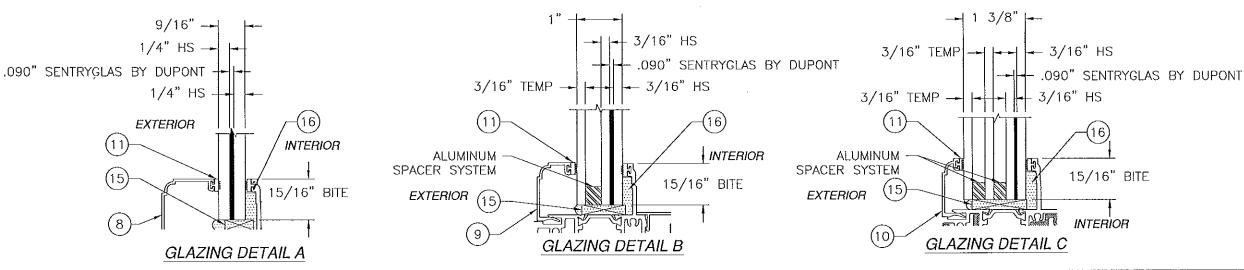


FOR APPROVED RAIL COMBINATIONS SEE SHEET 7

	REVISIONS				
REV	DESCRIPTION	DATE	, APPROVED		
Α	ADDED CALL OUTS	10/24/12	R.L.		
В	REVISED PER NEW TESTING	10/02/13	R.L.		
С	REVISED PER MD COMMENTS	03/13/14	R.L.		
D	ADDED GEOMETRIC SHAPES	09/04/14	R.L.		



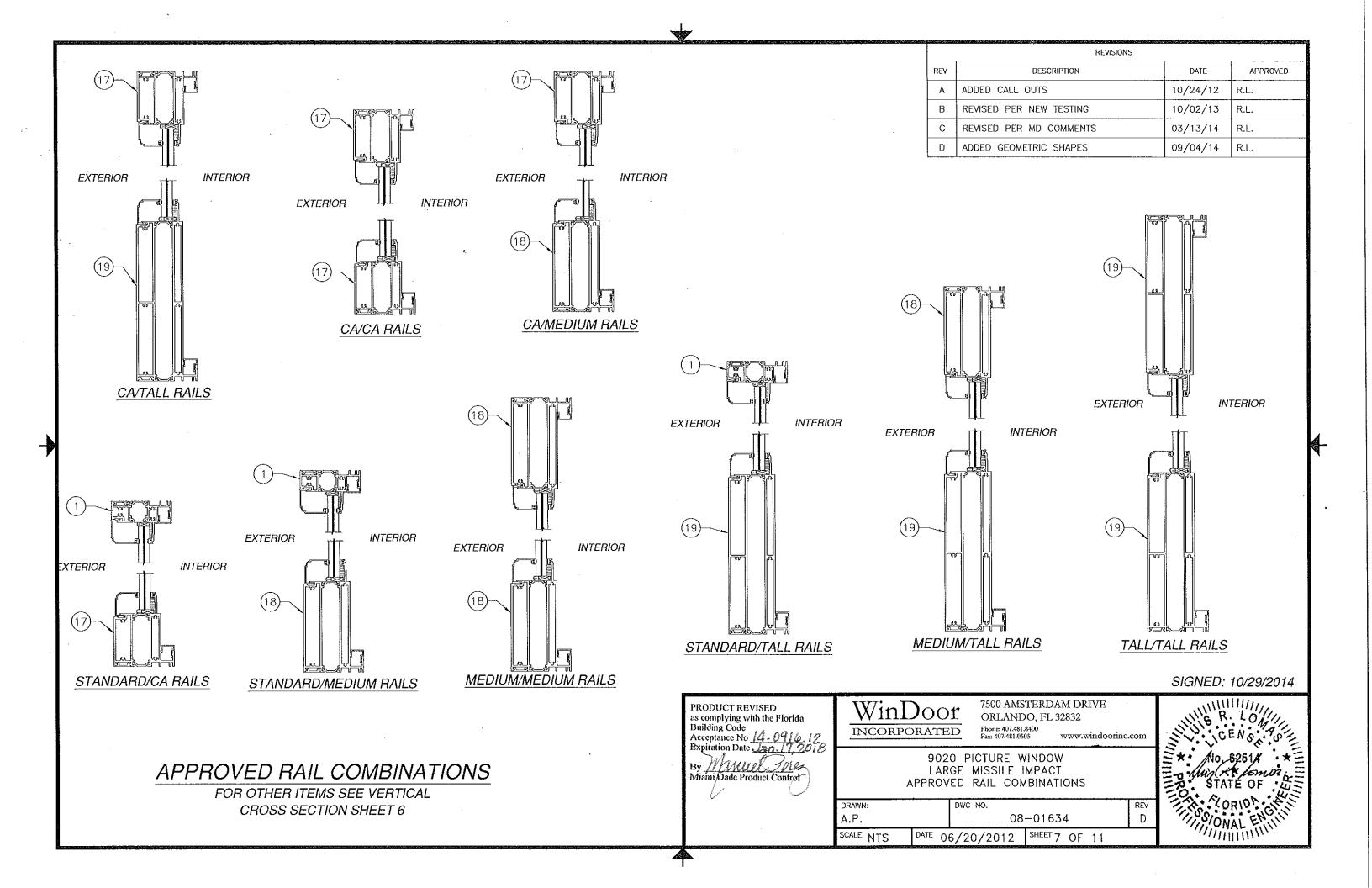
HORIZONTAL CROSS SECTION

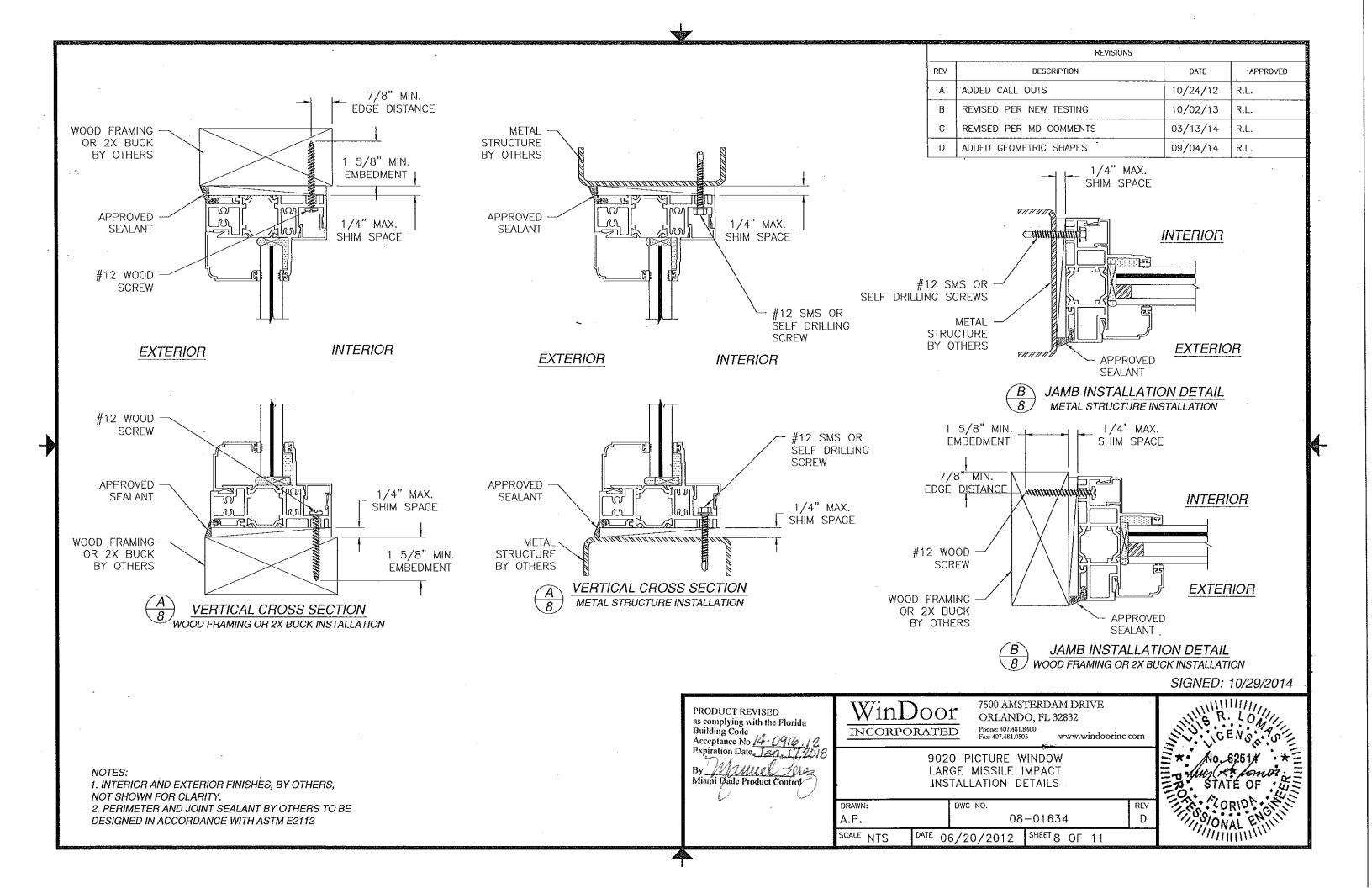


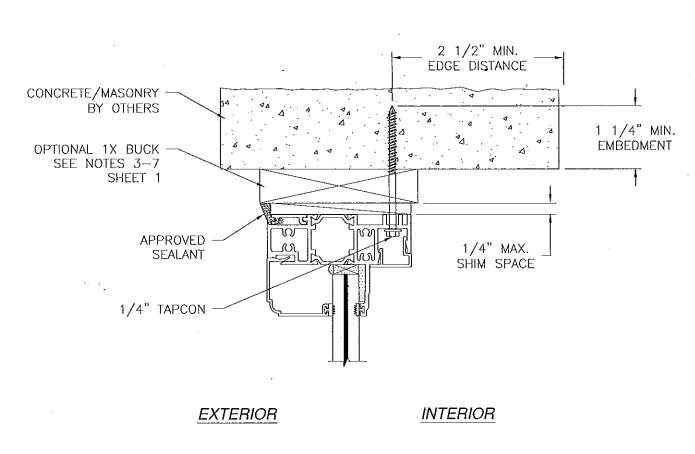
7500 AMSTERDAM DRIVE WinDoor ORLANDO, FL 32832 PRODUCT REVISED Phone: 407.481.8400 INCORPORATED as complying with the Florida www.windoorinc.com Fax: 407.481.0505 Building Code Acceptance No 14 9020 PICTURE WINDOW Expiration Date 37.1720 LARGE MISSILE IMPACT By Manuel Product Control B.O.M. AND CROSS SECTIONS DWG NO. DRAWN: 08-01634 A.P. SCALE NTS SHEET 6 OF 11 DATE 06/20/2012

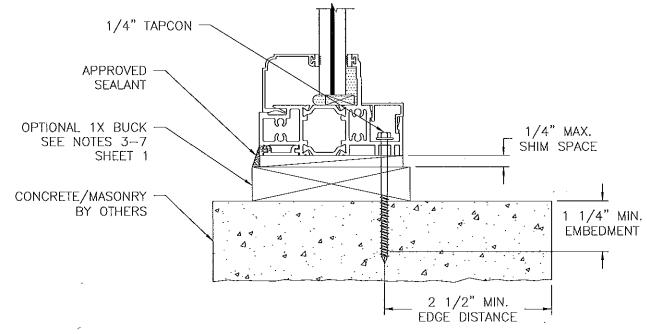
D

SIGNED: 10/29/2014



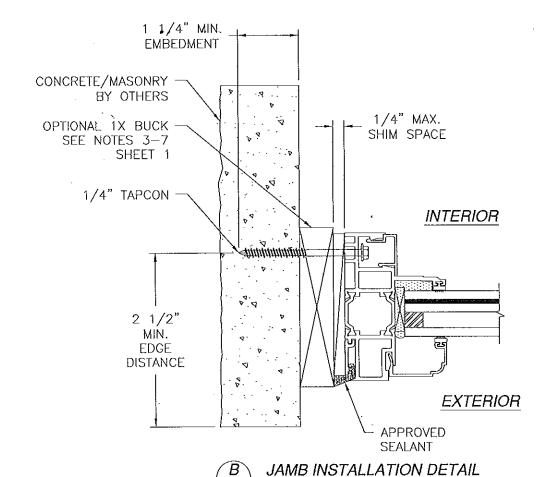






(A) VERTICAL CROSS SECTION CONCRETE/MASONRY INSTALLATION

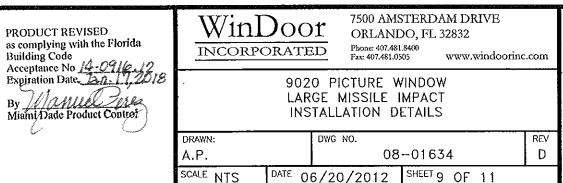
REVISIONS DESCRIPTION DATE **APPROVED** ADDED CALL OUTS 10/24/12 R.L. REVISED PER NEW TESTING 10/02/13 R.L. REVISED PER MD COMMENTS 03/13/14 R.L. ADDED GEOMETRIC SHAPES 09/04/14 R.L.



9 CONCRETE/MASONRY INSTALLATION

NOTES: 1. INTERIOR AND EXTERIOR FINISHES, BY OTHERS, NOT SHOWN FOR CLARITY. 2. PERIMETER AND JOINT SEALANT BY OTHERS TO BE DESIGNED IN ACCORDANCE WITH ASTM E2112

SIGNED: 10/29/2014

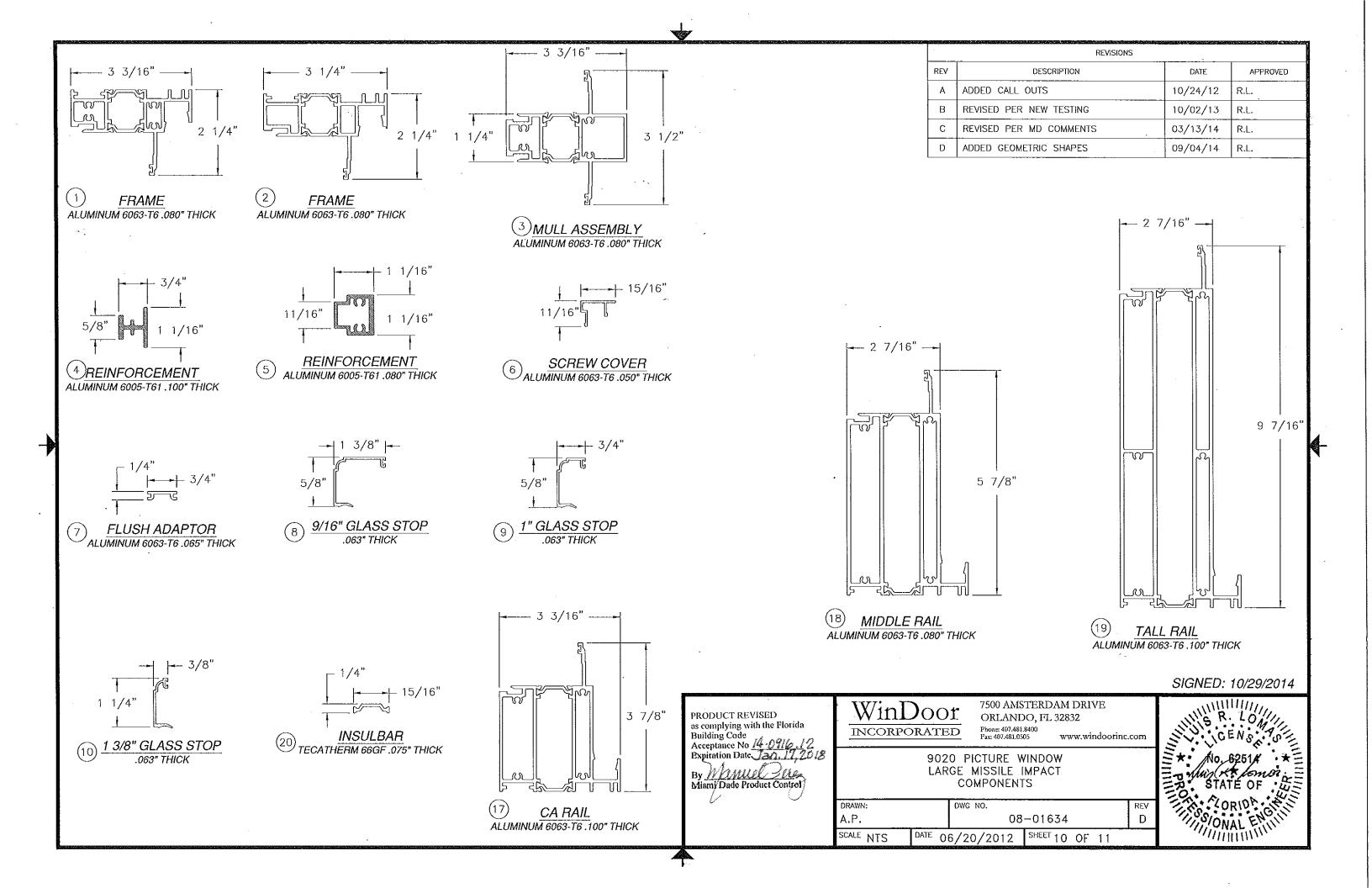


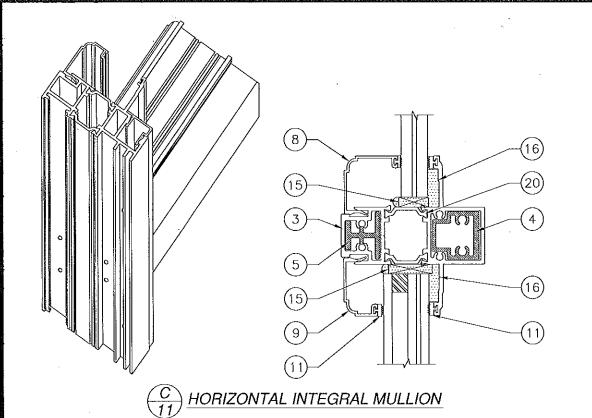
\* No. 6251X \*

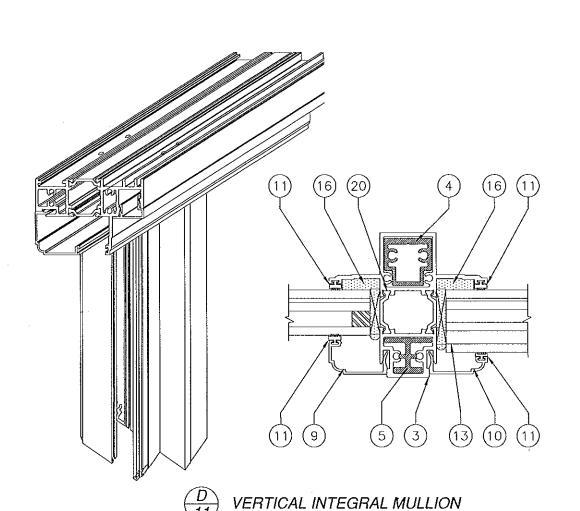
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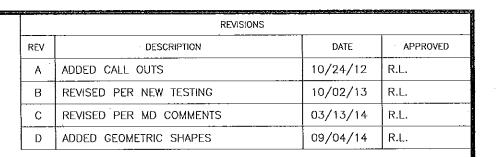
No. 6251X \*

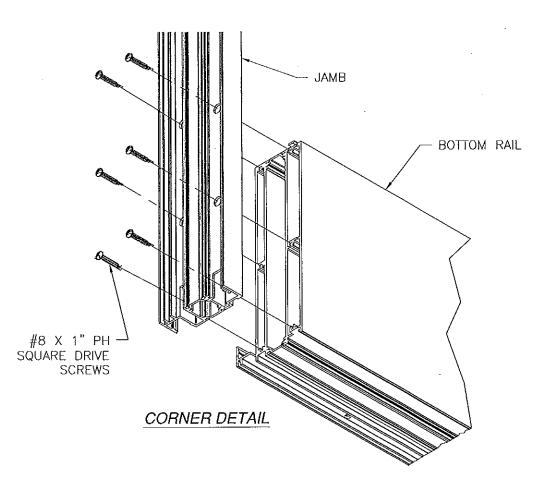
STATE OF WAR











SIGNED: 10/29/2014

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No 4-09/0./2
Begination Date Jan 17/20/8
By Manuel Control

WinDoor INCORPORATED

7500 AMSTERDAM DRIVE ORLANDO, FL 32832

Phone: 407.481.8400 Fax: 407.481.0505

.8400 www.windoorinc.com

9020 PICTURE WINDOW LARGE MISSILE IMPACT MULLION INSTALLATION DETAILS

DRAWN: DWG NO. REV A.P. 08-01634 D

SCALE NTS DATE 06/20/2012 SHEET 11 OF 11

